REMARKS

Claim Rejections

Claims 12-14 are rejected under 35 U.S.C. § 112, second paragraph. Claims 1, 3-6 and 8-10 are rejected under 35 U.S.C. § 102(e) as being anticipated by Kuo (U.S. 6,598,667). Claims 2, 7 and 11-14 are rejected under 35 U.S.C. §103(a) as being unpatentable over Kuo in view of Chen et al. (U.S. 2004/0045701).

Drawings

It is noted that the Examiner has accepted the drawings as originally filed with this application.

New Claims

By this Amendment, Applicant has canceled claims 1-14 and has added new claims 15-23 to this application. It is believed that the new claims specifically set forth each element of Applicant's invention in full compliance with 35 U.S.C. § 112, and define subject matter that is patentably distinguishable over the cited prior art, taken individually or in combination.

New claims 15-19 are directed toward a heat sink with guiding fins comprising: a base (1) having: a plate part (11); and two declining parts (12), each of the two declining parts extending downwardly from an edge of the plate part; two groups of fins (13), each fin of the two groups of fins extending upwardly from one of the two declining parts and being spaced apart from each adjacent fin; and a concave part (14) defined by an interior surface of each of the two groups of fins and the plate part connected to an edge of each of the two groups of fins.

Other embodiments of claims 15-19 of the present invention include: the base and the two groups of fins are integrally formed; the base and the two groups of fins are made of a material selected from a group consisting of copper and aluminum; the concave part has a top having a width equal to a width of a bottom thereof; and the concave part has a top having a width larger than a width of a bottom thereof.

New claims 20-23 are directed toward a method for manufacturing a heat sink with guiding fins, which comprises the steps of: forming a metal block (2) having two

parallel ramps (21, 22), two convex parts (24, 25), a concave part (23) located between the two convex parts, and a plate part (34) formed at a bottom of the concave part, a first of the two parallel ramps is formed at an angle less than 90 degrees from a block bottom of the block; cutting each of the two convex parts to form a fin (33) and a declining part (32) extending downwardly from an edge of the plate part; bending each fin to be perpendicular to the block bottom of the block; and repeating the cutting step b) and the bending step c) until a predetermined number of spaced apart fins are form.

Other embodiments of claims 20-23 of the present invention include: in the forming step a) the metal block is selected from a group consisting of copper and aluminum; in the forming step a) the concave part has a top having a width equal to a width of a bottom thereof; and in the forming step a) the concave part has a top having a width larger than a width of a bottom thereof.

The primary reference to Kuo teaches a heat dispensing device including a base (10) having two inclined top surfaces (13), a groove (11) located below and between the two inclined top surfaces (13), and heat dispensing plates (12) extended from each of the two inclined top surfaces.

Kuo does not teach each of the two declining parts extending downwardly from an edge of the plate part; a concave part (14) defined by an interior surface of each of the two groups of fins and the plate part connected to an edge of each of the two groups of fins; a first of the two parallel ramps is formed at an angle less than 90 degrees from a block bottom of the block; cutting each of the two convex parts to form a declining part extending downwardly from an edge of the plate part; nor does Kuo teach bending each fin to be perpendicular to the block bottom of the block.

It is axiomatic in U.S. patent law that, in order for a reference to anticipate a claimed structure, it must clearly disclose each and every feature of the claimed structure. Applicant submits that it is abundantly clear, as discussed above, that Kuo does not disclose each and every feature of Applicant's new claims and, therefore, could not possibly anticipate these claims under 35 U.S.C. § 102. Absent a specific showing of these features, Kuo cannot be said to anticipate any of Applicant's new claims under 35 U.S.C. § 102.

The secondary reference to Chen et al. teaches a radiator including a base board (11) having two sets radiation fins (12) connected to opposing sides of the base board. The two sets of radiation fins (12) are separated by a groove in the base board.

Chen et al. do not teach each of the two declining parts extending downwardly from an edge of the plate part; a concave part (14) defined by an interior surface of each of the two groups of fins and the plate part connected to an edge of each of the two groups of fins; a first of the two parallel ramps is formed at an angle less than 90 degrees from a block bottom of the block; cutting each of the two convex parts to form a declining part extending downwardly from an edge of the plate part; nor do Chen et al. teach bending each fin to be perpendicular to the block bottom of the block.

Even if the teachings of Kuo and Chen et al. were combined, as suggested by the Examiner, the resultant combination does not suggest: each of the two declining parts extending downwardly from an edge of the plate part; a concave part (14) defined by an interior surface of each of the two groups of fins and the plate part connected to an edge of each of the two groups of fins; a first of the two parallel ramps is formed at an angle less than 90 degrees from a block bottom of the block; cutting each of the two convex parts to form a declining part extending downwardly from an edge of the plate part; nor does the combination suggest bending each fin to be perpendicular to the block bottom of the block.

It is a basic principle of U.S. patent law that it is improper to arbitrarily pick and choose prior art patents and combine selected portions of the selected patents on the basis of Applicant's disclosure to create a hypothetical combination which allegedly renders a claim obvious, unless there is some direction in the selected prior art patents to combine the selected teachings in a manner so as to negate the patentability of the claimed subject matter. This principle was enunciated over 40 years ago by the Court of Customs and Patent Appeals in In re Rothermel and Waddell, 125 USPQ 328 (CCPA 1960) wherein the court stated, at page 331:

> The examiner and the board in rejecting the appealed claims did so by what appears to us to be a piecemeal reconstruction of the prior art patents in the light of appellants' disclosure. ... It is easy now to

> attribute to this prior art the knowledge which was first made available by appellants and then to assume that it would have been obvious to one having the ordinary skill in the art to make these suggested reconstructions. While such a reconstruction of the art may be an alluring way to rationalize a rejection of the claims, it is not the type of rejection which the statute authorizes.

The same conclusion was later reached by the Court of Appeals for the Federal Circuit in Orthopedic Equipment Company Inc. v. United States, 217 USPQ 193 (Fed.Cir. 1983). In that decision, the court stated, at page 199:

> As has been previously explained, the available art shows each of the elements of the claims in suit. Armed with this information, would it then be non-obvious to this person of ordinary skill in the art to coordinate these elements in the same manner as the claims in suit? The difficulty which attaches to all honest attempts to answer this question can be attributed to the strong temptation to rely on hindsight while undertaking this evaluation. It is wrong to use the patent in suit as a guide through the maze of prior art references, combining the right references in the right way so as to achieve the result of the claims in suit. Monday morning quarterbacking is quite improper when resolving the question of non-obviousness in a court of law.

In In re Geiger, 2 USPQ2d, 1276 (Fed.Cir. 1987) the court stated, at page 1278:

> We agree with appellant that the PTO has failed to establish a *prima facie* case of obviousness. Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching suggestion or incentive supporting the combination.

Applicant submits that there is not the slightest suggestion in either Kuo or Chen et al. that their respective teachings may be combined as suggested by the Examiner. Case law is clear that, absent any such teaching or suggestion in the prior art, such a combination cannot be made under 35 U.S.C. § 103.

Neither Kuo nor Chen et al. disclose, or suggest a modification of their specifically disclosed structures that would lead one having ordinary skill in the art to arrive at Applicant's claimed structure. Applicant hereby respectfully submits that no combination of the cited prior art renders obvious Applicant's new claims.

Summary

In view of the foregoing amendments and remarks, Applicant submits that this application is now in condition for allowance and such action is respectfully requested. Should any points remain in issue, which the Examiner feels could best be resolved by either a personal or a telephone interview, it is urged that Applicant's local attorney be contacted at the exchange listed below.

Respectfully submitted,

Date: December 17, 2004 By: _____

Bruce H. Troxell
Reg. No. 26,592

TROXELL LAW OFFICE PLLC
5205 Leesburg Pike, Suite 1404
Falls Church, Virginia 22041
Telephone: 703 575-2711
Telefax: 703 575-2707